

**Abstract**

The invention concerns methods for detecting guar gum alone or in mixtures of guar gum and locust bean gum. The invention also concerns methods for extracting, amplifying, and detecting DNA of guar and locust bean gums and the mixtures thereof. DNAs of plants from which guar and locust bean gums are extracted are amplified by means of polymerase chain reaction (PCR) using conserved initiators. Differences in the sequences of the amplification products obtained from these two plants enable their differentiation, the identification of guar DNA in mixtures of guar and locust bean gum mixtures and the design of guar-specific PCR initiators which detect guar only in mixtures of guar and locust bean gum.